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10/730,485

12/08/2003

Raymond C. Kurzweil

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EXAMINER

STOFFREGEN, JOEL

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                        |                      |  |
|------------------------------|------------------------|----------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b>  |  |
|                              | 10/730,485             | KURZWEIL, RAYMOND C. |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>      |  |
|                              | Joel Stoffregen        | 2626                 |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This action is in response to the original application filed on 12/08/2003.
2. Claims 1-30 are currently pending in this application. Claims 1, 15, and 28 are independent claims.

### ***Drawings***

3. The drawings are objected to because the text is difficult to read. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

4. The disclosure is objected to because of the following informalities: there are numerous grammatical errors throughout the specification and claims. Appropriate correction is required.

***Claim Objections***

5. **Claims 4, 18, and 31** are objected to because of the following informalities: "the follow-up messages" recited in the claims lack antecedent basis. Appropriate correction is required. For examination purposes, the claims will be dependent on claims 3, 17, and 30, respectively.

6. **Claims 6 and 20** are objected to because of the following informalities:

The claims recite the limitations "in conjunction with the match" and "text produced from the match". There is insufficient antecedent basis for these limitations in the claims. Nowhere in claims 1 or 15, or anywhere else in the disclosure, is it made clear as to what is being "matched" or what text this "match" will produce. For examination purposes, the match will be regarded as the response generated in claims 1 and 15, respectively.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. **Claims 1, 2, 6-16, and 19-29** are rejected under 35 U.S.C. 102(e) as being anticipated by BENNETT (Patent No.: US 7,050,977).

9. Regarding **claim 1**, BENNETT teaches a method of conducting commerce ("e-commerce applications", column 8, lines 44-45) comprising:

receiving a transaction request from a user as text input ("outputs recognized speech text corresponding to the user's question", column 11, lines 14-15);

using natural programming language to analyze the text input to build conversations with the user based on the transaction request ("natural language engine 190 facilitates structuring the query to database 188", column 11, lines 20-22);

conducting the transaction with the user based on the text input ("retrieves an appropriate answer", column 11, line 19);

generating a voice-synthesized response in accordance with the transaction through an avatar ("expressed as oral feedback by animated character agent 157", column 11, lines 25-26); and

tracking the transaction by storing the transaction in the database ("noun phrases of the string are stored", column 25, line 7).

10. Regarding **claim 2**, BENNETT further teaches that tracking comprises:

searching a database to find related information associated with conducting the transaction ("set of potential questions corresponding to the user's query are received as a result of a full-text search", column 25, lines 15-16).

11. Regarding **claim 6**, BENNETT further teaches that generating the response comprises:

searching a database in conjunction with the match ("set of potential questions corresponding to the user's query are received as a result of a full-text search", column 25, lines 15-16); and

animating the avatar with a voice and facial movements corresponding to text produced from the match ("expressed as oral feedback by animated character agent 157", column 11, lines 25-26).

12. Regarding **claim 7**, BENNETT further teaches that animating comprises generating helpful verbal suggestions for conducting the transaction ("told by character 1440 about how to elicit the information required", column 36, lines 14-15).

13. Regarding **claim 8**, BENNETT further teaches that animating comprises natural language programming techniques to develop and build conversations between the user and the avatar ("an environment that emulates a normal conversational human-like question and answer dialog", column 36, lines 28-29).

14. Regarding **claim 9**, BENNETT further teaches that receiving the text input is in response to a suggestion generated by the avatar ("told by character 1440 about how to elicit the information required", column 36, lines 14-15).

15. Regarding **claim 10**, BENNETT further teaches that the program performs an inquiry as to financial information related to the user ("account information", FIG. 18, column 37, lines 34-35).

16. Regarding **claim 11**, BENNETT further teaches that the program supports a sales transaction ("ordering", FIG. 18, column 37, line 33).

17. Regarding **claim 12**, BENNETT further teaches that the program supports a help desk inquiry that involves customer support for a product or service ("e-support", column 36, lines 55-67).

18. Regarding **claim 13**, BENNETT further teaches that the program supports a report for customer support to report a malfunctioning product, system, or service ("a 'monitor' problem, a 'keyboard' problem, a 'printer' problem, etc", column 36, lines 64-65).

19. Regarding **claim 14**, BENNETT further teaches that the program calls another program to process an inquiry (see FIG. 5, the query is processed by a number of different modules).

20. Regarding **claim 15**, BENNETT teaches a computer program product ("microcode and software routines", column 38, lines 57-58) residing on a computer readable medium ("suitable machine-readable format", column 38, line 61), for conducting commerce ("e-commerce applications", column 8, lines 44-45) comprises instructions for causing a computer to:

receive a transaction request from a user as text input ("outputs recognized speech text corresponding to the user's question", column 11, lines 14-15);



use natural programming language to analysis the text input to build conversations with the user based on the transaction request ("natural language engine 190 facilitates structuring the query to database 188", column 11, lines 20-22);

conduct the transaction with the user based on the text input ("retrieves an appropriate answer", column 11, line 19);

generate a voice-synthesized response in accordance with the transaction through an avatar ("expressed as oral feedback by animated character agent 157", column 11, lines 25-26); and

track the transaction by storing the transaction in the database ("noun phrases of the string are stored", column 25, line 7).

21. Regarding **claim 16**, BENNETT further teaches that the instructions to track comprise instructions to:

search a database for related information associated with conducting the transaction ("set of potential questions corresponding to the user's query are received as a result of a full-text search", column 25, lines 15-16).

22. Regarding **claim 19**, BENNETT further teaches that the transaction is a user request as to order status for an order being tracked in the database (see FIG. 18, block 1860, "view your orders").

23. Regarding **claim 20**, BENNETT further teaches that the instructions to generate the response comprise instructions to:

search a conversational engine in conjunction with the match ("set of potential questions corresponding to the user's query are received as a result of a full-text search", column 25, lines 15-16); and

animate the avatar with a voice and facial movements corresponding to text produced from the match ("expressed as oral feedback by animated character agent 157", column 11, lines 25-26).

24. Regarding **claim 21**, BENNETT further teaches that the instructions to animate comprise instructions to generate verbal suggestions for conducting the transaction ("told by character 1440 about how to elicit the information required", column 36, lines 14-15).

25. Regarding **claim 22**, BENNETT further teaches that the instructions to animate comprise instructions to use natural language processing techniques to develop and build conversations between the user and the avatar ("an environment that emulates a normal conversational human-like question and answer dialog", column 36, lines 28-29).

26. Regarding **claim 23**, BENNETT further teaches that the program performs an inquiry as to financial information related to the user ("account information", FIG. 18, column 37, lines 34-35).

27. Regarding **claim 24**, BENNETT further teaches that the program supports a sales transaction ("ordering", FIG. 18, column 37, line 33).

28. Regarding **claim 25**, BENNETT further teaches that the program supports a help desk inquiry that involves customer support for a product or service ("e-support", column 36, lines 55-67).

29. Regarding **claim 26**, BENNETT further teaches that the program supports a report for customer support to report a malfunctioning product, system, or service ("a 'monitor' problem, a 'keyboard' problem, a 'printer' problem, etc", column 36, lines 64-65).

30. Regarding **claim 27**, BENNETT further teaches that the program calls another program to process an inquiry (see FIG. 5, the query is processed by a number of different modules).

31. Regarding **claim 28**, BENNETT teaches a system for conducting commerce, the system comprising:

a server computer (see FIG. 1, block 180, "server-side") for

receiving a transaction request from a user as text input ("outputs recognized speech text corresponding to the user's question", column 11, lines 14-15);

using natural programming language to analysis the text input to build conversations with the user based on the transaction request ("natural language engine 190 facilitates structuring the query to database 188", column 11, lines 20-22);

conducting the transaction with the user based on the text input ("retrieves an appropriate answer", column 11, line 19);

generating a voice-synthesized response in accordance with the transaction through an avatar ("expressed as oral feedback by animated character agent 157", column 11, lines 25-26); and

tracking the transaction by storing the transaction in the database ("noun phrases of the string are stored", column 25, line 7); and

a client system (see FIG. 1, block 150, "client-side") for sending the text input to the server ("set of speech vectors that are transmitted over communication channel 160", column 11, lines 8-9).

32. Regarding **claim 29**, BENNETT further teaches that the client system runs a web browser program ("web page in browser 1200", column 38, line 2).

***Claim Rejections - 35 USC § 103***

33. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

34. **Claims 3-5, 17, 18, 30, and 31** are rejected under 35 U.S.C. 103(a) as being unpatentable over BENNETT (Patent No.: US 7,050,977) in view of SMITH et al. (Patent No.: US 6,853,982).

35. Regarding **claim 3**, BENNETT teaches all of the claimed limitations of claim 1.

However BENNETT does not specifically disclose the generation of follow-up messages.

In the same field of e-commerce, SMITH teaches generating follow-up messages to send to the user ("generates a list of additional items that are predicted to be of interest to the user", column 7, lines 30-32) that are based on added information stored in the database (see column 9, lines 37-52, a list of information used to generate the recommendation).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the recommendation system of SMITH with the e-commerce system of BENNETT so that the received messages will be relevant to the current browsing session (see SMITH, column 1, lines 10-12).

36. Regarding **claim 4**, SMITH further teaches that the follow-up messages with the user are statistically analyzed to generate marketing related information ("generates a list of additional items that are predicted to be of interest to the user", column 7, lines 30-32, where presenting items of interest is equivalent to marketing the item).

37. Regarding **claim 5**, BENNETT further teaches that the transaction is a user request as to order status for an order being tracked in the database (see FIG. 18, block 1860, "view your orders").

38. Regarding **claim 17**, BENNETT teaches all of the claimed limitations of claim 15. However BENNETT does not specifically disclose the generation of follow-up messages.

In the same field of e-commerce, SMITH teaches generating follow-up messages to send to the user ("generates a list of additional items that are predicted to be of interest to the user", column 7, lines 30-32) that are based on added information stored in the database (see column 9, lines 37-52, a list of information used to generate the recommendation).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the recommendation system of SMITH with the e-commerce system of BENNETT so that the received messages will be relevant to the current browsing session (see SMITH, column 1, lines 10-12).

39. Regarding **claim 18**, SMITH further teaches that responses to the follow-up messages are received ("rate individual book titles", column 10, lines 17-18) and the responses (see column 9, lines 37-52, ratings information is used) are statistically analyzed to generate marketing related information ("generates a list of additional items that are predicted to be of interest to the user", column 7, lines 30-32, where presenting items of interest is equivalent to marketing the item).

40. Regarding **claim 30**, BENNETT teaches all of the claimed limitations of claim 28. However BENNETT does not specifically disclose the generation of follow-up messages.

In the same field of e-commerce, SMITH teaches generating follow-up messages to send to the user ("generates a list of additional items that are predicted to be of interest to the user", column 7, lines 30-32) that are based on added information stored in the database (see column 9, lines 37-52, a list of information used to generate the recommendation).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the recommendation system of SMITH with the e-commerce system of BENNETT so that the received messages will be relevant to the current browsing session (see SMITH, column 1, lines 10-12).

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41. Regarding **claim 31**, SMITH further teaches that the server receives responses to the follow-up messages ("rate individual book titles", column 10, lines 17-18) and statistically analyzes the responses (see column 9, lines 37-52, ratings information is used) to generate marketing related information ("generates a list of additional items that are predicted to be of interest to the user", column 7, lines 30-32, where presenting items of interest is equivalent to marketing the item).

### ***Conclusion***

42. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. A list of the pertinent prior art can be found on the included form PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joel Stoffregen whose telephone number is (571) 270-1454. The examiner can normally be reached on Monday - Friday, 9:00 a.m. - 6:30 p.m..


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JS



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